THE NURSING OF DIPHTHERIA

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The first step in the nursing of diphtheria is naturally that of securing isolation. This subject has been so ably presented by Miss Dick in the May number of the JOURNAL that it would be mere repetition to go over the ground again. I can only refer the reader to the paper in question.

With regard to general hygienic measures, it goes without saying that the patient's room should be as bright and sunny as possible and provided with adequate means for ventilation. The regulation of heat should be such as to insure maintenance of a temperature of 68° F. The bodily care of the patient cannot be too carefully considered; also the care of the patient's bed, linen, and room. A liberal supply of disinfectants should always be on hand.

The administration of diphtheria antitoxin ranks first in the treatment of this disease, and it is an admitted fact that it should be administered at an early stage. In preparing the patient, the area for injection should be well washed with warm water and soap, followed by an antiseptic solution. A sterilized syringe and needle are generally provided by antitoxin manufacturers. The needle is inserted in the same manner as a hypodermic needle but more deeply, and the serum injected slowly; the puncture is then sealed with collodion.

Local Treatment.—The throat requires careful attention, and this is most efficiently effected by spraying. Various solutions may be ordered for this purpose. Arrange the bed where the best light is available, adjust the pillows so that the patient will not be required to move his head, place a piece of cotton, about a yard square, underneath his chin, securing it around the neck in order to protect the bed linen, turn his head slightly to one side, placing a pus basin underneath the chin so that the solution may flow into it. Always be absolutely certain that you are spraying the site of membrane. If the membrane appears loose do not attempt to remove it, as it will leave a bleeding surface and the abraded mucous membrane may afford a nidus for reinfection. If spraying produces nausea, as is often the case, swabbing may be resorted to. A swab may be conveniently made by firmly twisting some absorbent cotton around the end of a stick about the size of a lead pencil. The tongue may be depressed by a spoon handle, if a tongue depressor is not available, the swab saturated in the antiseptic solution and applied to the membrane. In treating the throat the utmost gentleness should be exercised. In severe cases treatment may be ordered every half hour. In this, as in other modes of treatment, the object should be that of avoiding unnecessary effort and saving the patient's strength from the start.

The same care should be exercised in spraying or irrigating the nose; the tendency to hæmorrhage should be constantly borne in mind, also the connection between the nose and ear, and the danger of affecting the aural passages. If hæmorrhage should occur and cannot be checked by cold applications, an astringent solution, often composed of iron and glycerine, or adrenalin chloride, 1–2000, is applied by packing the nares with small pledgets of absorbent cotton saturated with the astringent. These pledgets may be removed with care in about six hours' time.

The mouth, tongue, teeth and lips demand careful attention. A mixture of borax, listerine, and glycerine may be used as a mouth-wash, and a soothing ointment, as zinc oxide, suffices for the lips. Pieces of old soft cotton cloth may be used for handkerchiefs, which must afterwards be burnt. By having regard to these minor matters a nurse can do a great deal to alleviate the discomfort of the patient, particularly in those cases which are marked by purulent discharges, and obstruction of the respiratory passages.

In laryngeal diphtheria, many physicians order steam inhalations, and calomel fumigations, and it may be well to give detailed instructions of carrying these out. A tent may be extemporized by taking two flour-barrel hoops and using of each as much as will be sufficient to make two arches of thirty-three inches' span, and twelve or fourteen inches high. These arches are connected by laths two feet long,—those at the base being about an inch thick, and nailed on the inside of the hoops, while the others, five in number, may be nailed on the outside. Place this skeleton frame over the cot at the patient's head, and cover it with a large sheet, thus providing a little tent. A croup kettle, which may be purchased ready made, can be employed for generating the steam, but the apparatus may be substituted by an ordinary tea-kettle, to the spout of which has been fixed a tube terminating in a funnel. A gas stove, or other heating appliance supports the kettle while the funnel is inserted under the side of the tent cover. An opening should be left near the patient's head for the access of air and the egress of steam. An ounce and a-half of the compound tincture of benzoin is added to a gallon of water, which must be renewed every four hours. The volatilization of this tincture with the steam affords a moist warm atmosphere containing benzoic and cinnamic acid, which have usually a very beneficial effect in dissolving the membrane and in relieving the stenosis. Great care must be exercised in affording the patient sufficient air, and not raising the temperature too high, and of course in seeing that no accident occurs with the heating apparatus. The inhalation is continued until relief is obtained.

The apparatus for the volatilization of the calomel may consist of a little cylindrical cage, about eight inches high and wide, the top and bottom being made of galvanized tin, connected by a strong wire net, with an opening at the side. The croup kettle is taken away and the frame is placed at the foot of the cot, covered with a sheet forming a tent as before. An opening is left for access of air and the cage is suspended by a hook from the inside of the frame. An ordinary portable gauze spirit lamp, containing methylated spirits, is put inside the cage, placing a small tin containing the calomel (fifteen grains the usual amount) over it. In ordinary cases relief is afforded within twenty-four hours by the use of fumigations every hour, but the treatment may be continued longer. If salivation or diarrhœa supervene, the fumigations must be stopped. The nurse must be in constant attendance to watch the result of the treatment and to guard against accident. Should the foregoing fail in relieving the difficulty of breathing, intubation should be resorted to without delay. But as this is the special province of the physician, his particular directions must be followed.

If poultices are ordered for the relief of enlarged glands they should be made light, and kept hot by covering the poultice with a pad made of two layers of cotton batting, cut the required width, and placed between two folds of cheese cloth, which may be kept in place by a four-tailed bandage. The bandage and pad should always be kept fresh, and the surface where the poultice is applied must be frequently bathed.

The bowels must be kept regular, if necessary by the use of calomel, followed by a saline. The condition of the kidneys should be watched as indicated by the physical characteristics of the urine. This secretion should be tested daily for albumin. If albumin is present the patient should be well purged and the skin kept active.

One of the most important points, to be kept continually in mind, in the nursing of this disease, is the action of the diphtheria toxins on the heart. The most frequent deaths in diphtheria are due to heart failure; even the mildest cases may suddenly develop serious cardiac symptoms; the disease throughout should be regarded as eminently treacherous. Keep the patient in the recumbent position, even when everything points towards convalescence. A slow, weak, soft, or irregular pulse is a sufficient cause for notifying the physician at once, as are also vomiting and pain in the stomach. This may come in during the second or third week. In such cases medicines by mouth should be discontinued, a counter-irritant may be placed over the pit of the stomach. Heart stimulants, as brandy, strychnine, and digitalin, may be given by hypodermic injection. Elevate the foot of the bed so as to influence gravitation in aid of circulation. The extremities must not be allowed to become cold, the first manifestation of this kind being counteracted by the prompt application of heat. Nourishment should be given by nutritive enemata, as the stomach is not in a condition to absorb, and thus the patient's strength is saved. A good rubbing with olive oil, after the morning bath, has a nutritive effect, and is of value, particularly when the patient is emaciated and the skin dry and harsh.

Paralysis may occur early in the disease, or it may come on during convalescence or later,—paralysis of the soft palate, which gives a nasal character to the voice, and also causes a regurgitation of fluids through the nose. Nutritious diet and absolute rest will do a great deal to remedy this condition. In muscular paralysis, strychnine and massage are of service.

Diet.—During the acute stage when there is difficulty in swallowing, all food must be given in fluid form. Milk, egg-nog, beef essence, nutritious broths, should be given in small quantities and at regular intervals. Encourage the patient to drink plenty of water. Always rinse or wash the mouth after milk or egg-nog are taken, as both these are favorable culture media for bacteria. Where there is paralysis of the muscles of deglutition, food may be given in the form of milk jellies, beef jellies, junkets, custards, gruel, etc., as semi-solids are more easily swallowed than liquids.

If albumin is found in the urine, the diet should consist chiefly of milk.

The nurse will readily learn the form of diet that is most agreeable to the patient and should not urge him to take anything he dislikes; many patients cannot take milk, but will enjoy milk jelly with fruit flavoring, or cocoa. Nourishment should be served in as attractive a form as possible, and the importance of diet should always be borne in mind, particularly during the acute stage or in cases marked by great exhaustion and depression. With convalescence the appetite usually returns and in the absence of complications the diet need not be restricted.

When the patient is found bacteriologically free from diphtheria infection, he must be given a soap-and-water bath, the hair washed, and succeeding this a bath of bichloride of mercury, 1–5000, and fresh clothing put on, that has not been in the sick-room or in contact with infection, before he may mingle with the public. The room and all infected articles are then thoroughly disinfected.

THE NURSE FROM A PATIENT'S POINT OF VIEW

By E. F. H.

The faculty of warning, comforting and commanding, which Wordsworth ascribed to his Perfect Woman, I believe we ex-patients or patients-to-be like to feel our nurses possessed of, without, perhaps, acknowledging in our well moments that we do. All of us who have been ill and shut in by our own four walls, for weeks, lose for the time being our power to make the best use of that sixth sense (common sense), lose too some self-control, and our point of view does not extend much beyond the thing we want and, like the bad boy of the soap advertisement, we won't be happy till we get it. At this juncture, when we know we are behaving like children, it's really comforting to have the presiding genius of the room, disguised in cool, quiet stripes, come to the bedside and stand looking down with kindly eyes, smiling at our vagaries, a pleasant mouth saying *No,* with just a little shake of the head emphasizing it, and we succumb to the inevitable, usually very gracefully.

It's that innate respect for authority in the hands of those amply fitted to wield it, by special preparation for the work they are engaged in, that makes us acquiesce in their view, no matter where in life we may meet them.

Now what characteristics in a nurse make us respect her authority? Just the same, we might say, that impel our admiration and respect for any one we meet. Yes, but a nurse is a member of a profession, the most splendid a woman can enter, one that should be governed by the highest ideals, and so, perhaps, it is just as well to define at least some of these characteristics.

As a prerequisite, the best of technical training, devotion to her work, pride in it, sincerity, large-mindedness, great sympathy with suffering, which is deepened and broadened by experience rather than dulled by it, and a spirit of cheerfulness and helpfulness which is brought to bear on the smallest household worry and isn't limited to the immediate needs of the patient—from alcohol rubs to rubbing the cook